

Attorney Docket No. NITP:101US
U.S. Patent Application No. 10/734,053
Reply to Office Action of March 24, 2006
Date: June 22, 2006

Current Status of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

What Is Claimed Is:

1. (currently amended) A noise reducing device for a pressurized fluid system comprising:
 - a housing comprising an inlet end and an outlet end, said inlet end comprising a plurality of orifices and said outlet end each comprising at least one orifice for passing said fluid therethrough, said inlet end orifices orifice comprising an inlet face and an outlet face; said inlet end orifices orifice operatively arranged to maintain a backpressure upstream of said inlet end orifice greater than 5 psig; and,
 - a diffusing pack material disposed within said housing, said diffusing pack material maintaining contact with said outlet face of said inlet end orifice, wherein said diffusing pack material obstructs said inlet end orifices orifice and said outlet end orifice.
2. (original) The noise reducing device of Claim 1 wherein said diffusing pack material comprises monofilament wire knitted to form a mesh.
3. (original) The noise reducing device of Claim 2 wherein said mesh is folded upon itself to form a plurality of folded mesh layers.

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4. (original) The noise reducing device of Claim 3 wherein said folded mesh layers are compressed against said outlet face to a density of between 35 and 45 pounds per cubic foot.

5. (original) The noise reducing device of Claim 4 wherein said monofilament wire has a diameter between 0.006 and 0.011 inches.

6. (original) The noise reducing device of Claim 5 wherein said monofilament wire is resistant to oxidation.

7. (original) The noise reducing device of Claim 5 wherein said monofilament wire is heat resistant.

8. (original) The noise reducing device of Claim 4 further comprising stiffening means disposed within said folded mesh layers; said stiffening means operatively arranged to maintain the homogeneity of said diffusing pack material density.

9. (previously presented) The noise reducing device of Claim 8 wherein said stiffening means comprises wire screen.

10. (previously presented) The noise reducing device of Claim 9 wherein said wire screen is resistant to oxidation.

11. (previously presented) The noise reducing device of Claim 10 wherein said wire screen is heat resistant.

12. (previously presented) The noise reducing device of Claim 11 wherein said wire screen comprises stainless steel.

13. (currently amended) A noise reducing device for diffusing a pressurized gas comprising:

a housing comprising an inlet end and an outlet end; said inlet end comprising a plurality of orifices and said outlet end each comprising at least one orifice for passing said gas therethrough; said orifices orifice of said inlet end operatively arranged to maintain a backpressure upstream of said inlet end orifice;

a diffusing pack material disposed within said housing, said diffusing pack material comprising layered, knitted wire mesh, wherein said mesh is layered perpendicular to said housing;

at last one stiffener means; said stiffener means comprising wire screen layered perpendicular to said housing and disposed within said pack material, wherein said diffusing pack material maintains contact with said outlet end and said diffusing pack material obstructs said inlet end orifices orifice and said outlet end orifice.

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14. (previously presented) The noise reducing device of Claim 13 wherein said layered, knitted wire mesh is resistant to oxidation and heat.

15. (previously presented) The noise reducing device of Claim 13 wherein said layered, knitted wire mesh comprises stainless steel.

16. (previously presented) The noise reducing device of Claim 13 wherein said wire screen is resistant to oxidation and heat.

17. (previously presented) The noise reducing device of Claim 13 wherein said wire screen comprises stainless steel.

18. (currently amended) A noise reducing device for diffusing a pressurized gas comprising:

a housing comprising an inlet end and an outlet end; said inlet end comprising a plurality of orifices and said outlet end each comprising at least one orifice for passing said gas therethrough; said orifices orifice of said inlet end operatively arranged to maintain a backpressure upstream of said inlet end orifice;

a first layer of knitted wire mesh aligned perpendicular to said housing; said first layer disposed proximate said inlet end orifice and arranged to obstruct said inlet end orifices orifice;

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at a second wire screen layer; said wire screen layer aligned parallel and
proximate said first layer;

a third layer of knitted wire mesh aligned parallel with said second layer;
a fourth wire screen layer; said fourth layer aligned parallel with said third layer
disposed proximate said outlet end and maintaining contact therewith, wherein said fourth layer
is arranged to obstruct said outlet end orifice.

19. (previously presented) The noise reducing device of Claim 18 wherein said knitted wire
mesh and said wire screen layers comprise stainless steel.